

ABSTRACT OF DISCLOSURE

A process for producing a saccharide having a lowered molecular weight, which comprises irradiating an electron beam to a polysaccharide fraction. Also, a process for producing a saccharide having a weight average molecular weight of n (Da), which comprises irradiating an electron beam to a polysaccharide fraction which has a weight average molecular weight of M (Da) and is in a solid state at a dosage of d (kGy) that satisfies the following equation:

$$n = Me^{ad}$$

(wherein M is a number of 5,000 to 70,000; n is an optional positive number; e is the base of natural logarithm; and a is a number of -0.008 to -0.004). Furthermore, a process for producing hyaluronic acid having a lowered molecular weight, which comprises irradiating an electron beam to a hyaluronic acid fraction.